

Michigan Jobs from Energy Efficiency & Renewable Energy

Although often overlooked, energy costs have a profound effect on the Michigan economy. In an average year, Michigan citizens, businesses, and public institutions spend \$20 billion per year on energy, more than twice the entire state general fund budget! This represents a tremendous financial drain on the state, because Michigan is almost totally dependent on fuels imported from other states and countries; importing 100% of the coal and uranium, 96% of the oil and other petroleum products, and about 75% of the natural gas we consume. Every dollar of energy saved is a dollar that stays in Michigan and can be re-spent in our local economy.

In addition, many recent studies have indicated that Michigan because of its industrial base is in a good position to benefit from a greater use of energy efficiency and renewable energy products and equipment. Energy efficiency and renewable energy investments can help benefit us in two ways: 1) spending money on Michigan made products and 2) saving money that can be spent in our local economy.

A January 2005 report from the American Council for an Energy-Efficient Economy (*Examining the Potential for Energy Efficiency To Help Address the Natural Gas Crisis in the Midwest*) estimates that energy efficiency programs in Michigan could create 11,380 jobs by 2020.

More renewable energy will also benefit Michigan. According to a study entitled *Renewing America's Economy* (September 2004) released by the Union of Concerned Scientists, a national renewable electricity standard of 20 percent by 2020 would produce a net gain of 4,900 jobs in Michigan. Renewable energy would create 2.3 times more jobs than generating electricity from new natural gas and coal power plants.

The Renewable Energy Policy Project has recently completed reports on the potential job impacts from increases in the use of solar and wind power. *Solar PV Development: Location of Economic Activity* released in January 2005 indicates that incentives to increase photovoltaic installations nationwide from 340 MW to 9600 MW would create 613 new jobs in Michigan by 2015. *Wind Turbine Development: Location of Manufacturing Activity* released in September 2004 indicates that a national effort to develop 50,000 MW of wind power would create 8,549 jobs in Michigan.

The various studies use different assumptions and estimates are based on major policy initiatives. There is a common conclusion – Michigan's economy can really benefit from public policies that increase the use of energy efficiency and renewable energy. The following examples show how energy efficiency and renewable energy are creating new jobs in Michigan.

- United Solar Ovonic will invest \$80 million to locate a new production facility in Auburn Hills. State tax credits valued at \$6 million over 20 years and a \$100,000 job training grant prompted the manufacturer of photovoltaics to locate the facility in Michigan over a competing site in Ohio. The facility will create 625 new jobs, including 230 directly by the company. A subsidiary of Energy Conversion Devices, United Solar currently employs 200 employees in Troy and Auburn Hills.
- In February 2006, a plan was announced to expand United Solar Ovonic's module manufacturing capacity to 300 MW by 2010. The first phase of the expansion plan includes the construction of a manufacturing facility in Greenville with an annual capacity of 50 MW. The new plant will create 200 jobs directly and another 363 jobs indirectly. It is expected to be operational in calendar year 2007. The state and the city of Greenville offered an incentive package worth about \$37 million to persuade United Solar Ovonic to build its plant in Greenville, a city hungry for jobs after Electrolux AB recently closed its plant there. United Solar Ovonic had been considering building its plant in South Carolina.
- Insulspan, a manufacturer of structural insulated panels in Blissfield, has seen steady growth in the demand for their products. The company has about 100 employees in Blissfield versus 65 about 10 years ago. This has been in spite of heavily automating their operations.
- Noble Environmental Power is building a wind energy park of 32 turbines in Huron County in Michigan's thumb. The project will bring land lease payments to farmers, up to 200 temporary construction jobs, and 10 permanent jobs to operate and maintain the wind generators.
- Governor Granholm recently announced the approval of tax-free Agricultural Renaissance Zones in Lenawee, Barry, Calhoun, and St. Clair counties to encourage the construction of four new ethanol production plants. The plants are expected to create 155 new jobs through \$275 million in new private investment.
- Hemlock Semiconductor, the world's leading producer of polycrystalline silicon, began construction of a \$400-\$500 million expansion at its Hemlock headquarters in December 2005. The expansion is driven by increasing demand for polycrystalline silicon, the cornerstone material used in the production of solar cells. The expansion will increase site capacity by 50% and is expected to generate more than 100-150 full-time direct jobs and an equal number of contractor positions in the next three years. Additionally, there will be 400 temporary local contractor jobs.

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March 6, 2006

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